#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015732

Address: 333 Burma Road **Date Inspected:** 13-Jul-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Gao Zhi Chun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Tower & OBG Components

**Summary of Items Observed:** 

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

## BAY#10

This QA Inspector observed the following work in progress

Weld build up by Shielded Metal Arc Welding (SMAW):

Weld build up being performed located on North tower Lift-5 Transverse Diaphragm # TD5-10. Welder is identified as 040582. ZPMC Quality Control (QC) Inspector is identified as Lu Wei Chao. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 2G (2F) – Repair – 1. (See attached photo)

## ORTHOTROPIC BOX GIRDER (OBG) LIFT-13 AT BAY#10

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 004 located on Edge Plate EP3016 – 001. Welder is identified as 053869. ZPMC Quality Control (QC) Inspector is identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

Weld joint # 106 located on Side Plate SP3081B – 001. Welder is identified as 053870. ZPMC Quality Control

## WELDING INSPECTION REPORT

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(QC) Inspector is identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2132. (See attached photo)

Weld joint # 005 located on Edge Plate EP3016 - 001. Welder is identified as 052075. ZPMC Quality Control (QC) Inspector is identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

BAY#11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint #4A located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 12. Welder is identified as 046704. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint # 4A located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 12. Welder is identified as 040614. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint #2A located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 20. Welder is identified as 040667. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint # 2B located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 7. Welder is identified as 040656. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

#### ORTHOTROPIC BOX GIRDER (OBG) LIFT-13 AT BAY#11

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint #31 located on Side Plate SP3068 – 001. Welder is identified as 054460. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

Weld joint #42 located on Side Plate SP3068 – 001. Welder is identified as 205649. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## **Summary of Conversations:**

No Relevant Conversations.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer